

# Workplace Alaska

## Class Specification Radiological Health Specialist II

**Created:**  
10/27/1997 by Adrienne Snow  
**Finalized on:**

**AKPAY Code:** P5416  
**Class Outline Cat:** B  
**Approved by:**

**Class Code:** PG0672  
**Class Range:** 20  
**Class Status:** Active

**Category:**  
**Original Date:** 12/01/1978

**Class Title:** Radiological Health Specialist II  
**Use MJR Form:** Standard

**Original Comments:**  
Original

**Subsequent Revision Dates/Comments:**  
09/30/1993 - (CD/NC) Title and Code Change (Radiological Physicist; 2450), expanded to two level series  
09/25/2008 - Workplace AK spec revision: Added Census Job Code and AKPAY Code fields; Replaced Category field with Class Outline Category; Updated EEO4, SOC, and Class Code fields; Removed DOT field.

**Last Update:** **EEO4:** B **SOC:** 29-9011 **Census:** 02

**Last Update Comments:**

### Definition:

Under general direction, positions plan, implement and/or administer a comprehensive statewide radiation protection program covering ionizing and non-ionizing sources of radiation.

### Distinguishing Characteristics:

This series is distinguished by the role in reducing unnecessary ionizing and non-ionizing radiation exposure through registration and safety inspection of radiation sources, including uses in the healing arts, industry, research, and education.

Radiological Health Specialist II, in addition, is responsible for administering the statewide radiation protection program including budgeting, program planning, and staff supervision.

### Examples of Duties:

Conducts on-site inspections of ionizing radiation sources throughout the State; investigates complaints; ensures radiation sources meet minimum standards and are operated in compliance with Alaska Radiation Protection Regulations; prepares technical reports of inspections and investigations; makes recommendations for minimizing radiation exposure and improving diagnostic results in the healing arts; takes action to ensure compliance through enforcement of applicable regulations.

Implements radon public information and home monitoring program; prepares associated grant proposals and program reports for the U.S. Environmental Protection Agency; develops RSA's with public agencies; interprets results and makes recommendations regarding radon reduction techniques.

Inspects and evaluates biological hazards associated with non-ionizing radiation sources such as laser, cathode ray tube equipment, microwave ovens, microwave and radio-frequency transmitters.

Provides input on budgeting or program planning, identification of present and potential radiological health problems, and radiation protection policies or legislation.

Prepares responses to requests for information and inquiries.

Maintains files of publications and technical information related to radiological health and maintains up-to-date knowledge on new, rapidly developing sophisticated technologies.

Coordinates health aspects of Naturally Occurring Radioactive Material (NORM) (e.g. material occurring naturally in the environment which is radioactive, i.e. uranium).

Inspects, evaluates and prepares reports for mammography units in the state. Implements mammography health and safety programs.

Participates in meetings and conferences with local officials, professional groups, industry representatives and governmental agencies regarding radiological health problems. Lectures and provides training and consultative services to professional groups, other State and local agencies, and the public.

Responds, and at the higher level, coordinates response to incidents and accidents involving radioactive materials; provides technical expertise regarding appropriate actions in emergency response.

Administers statewide radiation protection program including budgeting; development, implementation, and assessment of program plans and operations; providing direction and supervision to staff.

Advises administrative heads on needed legislation in radiation protection; provides recommendations on matters concerning statewide radiation protection policies.

Maintains liaison with the U.S. Nuclear Regulatory Commission and with other federal agencies such as the Environmental Protection Agency and the Food and Drug Administration.

Reviews architectural drawings and specifications of new construction for radiation shielding, calculates minimum shielding requirements, and makes recommendations for shielding type and thickness to protect the public and occupational radiation workers.

Conducts or oversees staff providing lectures, instruction, consultation and in-service training to professional groups or individuals concerned with occupational uses or health aspects of radiation exposure, or providing public education and information regarding radiation hazards.

Performs other related duties as required.

**Knowledge, Skills and Abilities:**

Considerable knowledge of principles, practices and current developments associated with radiological health and safety.

Considerable knowledge of national radiation protection policies and standards, radiation sources.

Considerable knowledge of standard methods of measurements and effects of ionizing and non-ionizing radiation, safety inspection procedures, and use and maintenance of radiological monitoring equipment.

Considerable knowledge of proper design, calibration and operation of equipment producing radiation.

Considerable knowledge of radioisotope use, handling, storage and disposal.

Considerable knowledge of environmental impact of radiation, physical and biological effects of radiation.

Considerable knowledge of nuclear physics and the principles of radiation protection.

Skill in the use radiation field survey and laboratory equipment.

Ability to communicate effectively with others, both verbally and in writing, in order to convey technical information to professional persons as well as the general public.

Ability to establish and maintain effective relationships with government officials, private industry officials, professional personnel and others.

Ability to reason logically and accurately, analyze data, facts, information, issues and situations, draw valid conclusions, and propose viable solutions and courses of action.

Ability to understand, interpret, apply and explain laws, regulations, policies and procedures associated with radiological health and safety.

Ability to make presentations and lead discussion panels, workshops or seminars.

Thorough knowledge of principles, practices and current developments associated with radiological health and safety.

Thorough knowledge of national radiation protection policies and standards, radiation sources.

Thorough knowledge of standard methods of measurements and effects of ionizing and non-ionizing radiation, safety inspection procedures, and use and maintenance of radiological monitoring equipment.

Thorough knowledge of proper design, calibration and operation of equipment producing radiation.

Thorough knowledge of radioisotope use, handling, storage and disposal.

Thorough knowledge of environmental impact of radiation, physical and biological effects of radiation.

Thorough knowledge of nuclear physics and the principles of radiation protection.

Considerable knowledge of the federal, state, and local relationships as they impact the operation of the Radiological Health Program.

Working knowledge of the principles and techniques of administrative management including organization, planning, staffing, training, budgeting and reporting.

Working knowledge of supervisory principles and techniques.

Ability to settle issues, handle unusual circumstances, and make responsive decisions.

Ability to organize, plan, coordinate, direct and evaluate a statewide radiological health program.

Ability to instruct, supervise and evaluate employees.

**Minimum Qualifications:**

Bachelor's degree or the equivalent from an accredited college with a major in radiological health, health physics, physics, chemistry, environmental science, or closely related field;

AND

Two years of professional experience carrying out the work of a comprehensive radiation protection program of broad scope and impact.

An example of a job class to consider in the State of Alaska is Radiological Health Specialist I;

OR

Five years of professional experience which involved four or more of the following:

1. Inspecting, investigating or surveying the use of radiation producing equipment;
2. Determining compliance with rules and regulations governing radiation use;
3. Providing advice on safe practices concerning radiation;
4. Operating radiation field survey and laboratory instruments;
5. Carrying out procedures to control radioactive contamination or to reduce radiation exposures to the public;
6. Evaluation of hazards associated with use of radioactive materials.

One year must have been in a lead, supervisory, management or administrative capacity and one year must have been in medical and/or dental x-ray protection. These two years of specialized experience may have been gained concurrently.

Substitution:

A master's degree or the equivalent from an accredited college in radiological health, health physics, physics, chemistry, environmental science, or closely related field may substitute for the nonspecific experience on a year-for-year basis.

AND

Two years of professional experience carrying out the work of a comprehensive radiation protection program of broad scope and impact.

Substitution:

Five years of professional experience performing four or more of the functions described above.

AND

One year of experience in a lead, supervisory, management or administrative capacity.

AND

One year of experience in medical and/or dental x-ray protection. (These years of specialized experience may have been gained concurrently.)

**Required Job Qualifications:**

**(The special note is to be used to explain any additional information an applicant might need in order to understand or answer questions about the minimum qualifications.)**

**Special Note:**

Special Requirement: Positions in these job classes may require lifting and carrying substantial weight (50 pounds or more); travel by boat or small aircraft.

Incumbents are exposed to occupational levels of ionizing radiation and electrical current in the normal and customary performance of the essential functions of their position.

**Minimum Qualification Questions:**

Do you have a bachelor's degree or the equivalent from an accredited college with a major in radiological health, health physics, physics, chemistry, environmental science, or closely related field?

AND

Do you have EITHER two years of professional experience carrying out the work of a comprehensive radiation protection program of broad scope and impact. An example of a job class to consider in the State of Alaska is Radiological Health Specialist I;

OR

Five years of professional experience which involved four or more of the following:

1. Inspecting, investigating or surveying the use of radiation producing equipment;
2. Determining compliance with rules and regulations governing radiation use;
3. Providing advice on safe practices concerning radiation;
4. Operating radiation field survey and laboratory instruments;
5. Carrying out procedures to control radioactive contamination or to reduce radiation exposures to the public;
6. Evaluation of hazards associated with use of radioactive materials.

AND

Did this experience include at least one year of experience in a lead, supervisory, management or administrative capacity and one year must have been in medical and/or dental x-ray protection (the two years of specialized experience may have been gained concurrently)?

**Or Substitution:**

Do you have a master's degree or the equivalent from an accredited college in radiological health, health physics, physics, chemistry, environmental science, or closely related field may substitute for the non-specific experience on a year for year basis?

AND

Do you have EITHER two years of professional experience carrying out the work of a comprehensive radiation protection program of broad scope and impact?

**Or Substitution:**

Five years of professional experience performing four or more of the functions described above?

AND

Did this experience include at least one year of experience in a lead, supervisory, management or administrative capacity, and one year of experience in medical and/or dental x-ray protection (the years of specialized experience may have been gained concurrently)?